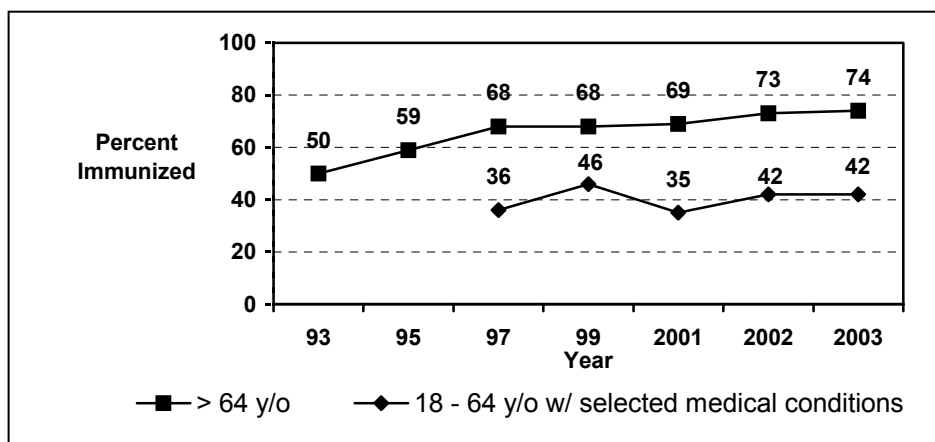


## New Recommendations for Influenza Vaccine 2004 – 2005

### INFLUENZA VACCINATION RATES FOR MASSACHUSETTS ADULTS

Since 1997, influenza vaccination rates for adults in Massachusetts have leveled off; only 42% of people younger than 65 with a chronic medical condition receive annual flu vaccine. Increasing coverage in this group is the highest priority for expanding vaccine use.

#### **Influenza Vaccination Rates for Massachusetts Adults Results of the Massachusetts Behavioral Risk Factor Surveillance Survey**



### VACCINATION OF HEALTH CARE WORKERS

Studies have shown that up to 25% of health care workers are infected with influenza every flu season. Influenza vaccination of health care workers reduces transmission of influenza to high-risk persons who may themselves have a suboptimal response to the vaccine. Nationally, only 36% of health care workers receive annual influenza vaccination.

***Protect yourself, your family and your patients.  
All health care providers should receive flu vaccine every year.***

An Employee Immunization Toolkit was developed by MassPRO and is available on line at [www.massmed.org/pages/flu\\_kit.asp](http://www.massmed.org/pages/flu_kit.asp), or by calling MassPRO at 781-419-2749.

**New!** Visit <http://idinchildren.com/monograph/CMEframeset.asp?article=0402/splash.asp&mono=y> for a web-based CME course, *Importance of Vaccinating Health Care Workers Against Influenza*.

For strategies to improve influenza vaccination rates among health care workers in your facility go to <http://www.nfid.org/publications/hcwmonograph.pdf>.

### **2003 – 04 INFLUENZA SEASON**

Nationally, the 2003 – 04 flu season was the earliest flu season since 1977. The season peaked in December and was moderately severe, with influenza type A (H3N2) Fujian viruses, a variant of the A/Panama (H3N2), predominating. Nationally, 152 deaths were reported in children < 18 years of age, usually of septic-like shock. Influenza-associated pediatric deaths are now reportable.

This was the first year that laboratory–confirmed influenza was reportable in Massachusetts and MDPH received > 5,000 reports of rapid flu tests. In addition, 271 specimens were submitted to the state lab for influenza testing, compared to 122 the previous season. Of the 161 confirmed cases, 151 were A/H3N2, 1 was A/H1N1, 1 was B/Hong Kong, 6 were B/Sichuan-like and 2 type A's were unable to be subtyped. MDPH also received > 500 reports of positive culture results. Fifty-six clusters of influenza-like illness were reported, compared with 11 the previous season.

Avian influenza A (H5N1)-associated outbreaks in poultry in several Asian countries resulted in 34 confirmed human cases in Thailand and Vietnam. These human cases were associated with severe respiratory illness and a 68% case-fatality rate. Three human cases associated with outbreaks of avian influenza in poultry were also reported in the U.S. and Canada. For information on avian influenza, visit the CDC website: <http://www.cdc.gov/flu/avian/index.htm>.

### **2004 – 05 INFLUENZA SEASON**

The 2004 – 05 influenza vaccine formulation includes one virus from last year's vaccine [A/New Caledonia/20/99 (H1N1)-like] and 2 new viruses [A/Fujian/411/2002-like (H3N2) and B/Shanghai/361/2002-like].

Please visit the MDPH website at [www.mass.gov/dph](http://www.mass.gov/dph) for updated information on the availability of state-supplied influenza vaccine. As in previous years, state-supplied flu vaccine will not be sufficient to meet the demand for flu vaccine in the Commonwealth, where an estimated 1.7 million people are included in at least one group for whom flu vaccine is recommended.

Providers should purchase vaccine for their patients and staff. Flu vaccine may be available for purchase from the manufacturers listed below and from distributors listed on the Health Industry Distributors Association website: [www.hidanetwork.com/govtrelations/flulinks.asp](http://www.hidanetwork.com/govtrelations/flulinks.asp).

Aventis		
Pasteur	800-822-2463	Inactivated influenza vaccine
		Inactivated influenza vaccine (only for people $\geq$ 4 years of age)
Chiron	800-244-7668	
MedImmune	877-358-6478	<i>FluMist</i> (only for healthy people 5 – 49 years of age)

### **LIVE ATTENUATED INFLUENZA VACCINE (LAIV)**

FluMist™, an intranasally-administered, trivalent LAIV, is licensed to prevent illness from influenza A and B in healthy persons aged 5 – 49 years. LAIV should not be given to anyone at

increased risk for influenza-related complications (see list below) or anyone with a history of Guillain-Barré syndrome. Use inactivated vaccine for these people.

**New!**

Health care workers not caring for severely immunocompromised patients can receive either LAIV or the inactivated vaccine. Inactivated vaccine is preferred for vaccinating household members, health care workers and others who have close contact with severely immunocompromised persons during periods when such patients require care in a protected environment. Health Care Workers receiving LAIV should refrain from contact with severely immunocompromised patients for **7 days** after receipt of the vaccine.

Severely immunocompromised persons should not administer LAIV. However, other persons at risk, including those with mild immunodeficiency, pregnant women and persons  $\geq 50$  years of age, may administer LAIV.

**New!**

### **INFLUENZA VACCINE FOR CHILDREN**

Children 6 months or older can receive inactivated influenza vaccine. Healthy children  $\geq 5$  years of age can receive either inactivated influenza vaccine or LAIV.

**Number of Doses:** Previously unvaccinated children  $< 9$  years of age should receive 2 doses of influenza vaccine. If the child is receiving inactivated vaccine, the 2 doses should be  $\geq 1$  month apart. If the child is receiving LAIV, the 2 doses should be 6 – 10 weeks apart. If a child  $< 9$  years of age receiving influenza vaccine for the first time does not receive a second dose in the same season, only 1 dose of vaccine should be administered the following season.

**Availability of State-Supplied Vaccine for Children:** MDPH is increasing the number of doses of inactivated influenza vaccine available for children 6 – 23 months of age and for children 2 – 18 years of age at risk for complications from influenza. MDPH is not providing LAIV.

**Thimerosal:** Some inactivated influenza vaccines contain a small amount of thimerosal. No evidence exists of harm from exposure to thimerosal-containing vaccines, while evidence is accumulating of lack of any harm resulting from exposure to such vaccines. The known benefits of vaccination outweigh any potential risks from thimerosal. MDPH is not providing thimerosal-free influenza vaccine.

### **RECOMMENDATIONS FOR USE OF INFLUENZA VACCINE**

#### **1. INFLUENZA VACCINE IS RECOMMENDED FOR THE FOLLOWING:**

##### **I. Persons at Increased Risk for Influenza-Related Complications:**

**New!**

1. All children 6 – 23 months of age.
2. All persons  $\geq 50$  years of age.
3. Persons  $\geq 6$  months of age who:
  - Live in long-term care facilities that house persons with chronic medical conditions.
  - Have chronic cardiac or pulmonary conditions, including asthma.
  - Have required regular medical follow-up or hospitalization during the preceding year due to chronic metabolic diseases (including diabetes), renal dysfunction, hemoglobinopathies, or immunosuppression (including immunosuppression caused by medications or HIV).
4. Persons 6 months – 18 years of age who are receiving long-term aspirin therapy.

**New!**

5. Women who will be pregnant anytime during influenza season.

## **II. People Who Can Transmit Influenza to Persons at High Risk:**

1. All personnel in hospital and outpatient settings, including emergency response workers.
2. Employees of long-term care facilities, assisted living and other residences for persons in high-risk groups, who have contact with patients or residents.
3. Persons who provide home care to persons in high-risk groups.
4. Household members (including children) of persons in high-risk groups.
5. Household contacts and out-of-home caretakers of children 0 - 23 months of age.

## **IV. Consider Influenza Vaccine** for the following groups, depending upon vaccine availability:

1. Persons who provide essential community services.
2. Students and other persons in institutional settings (e.g., dormitories).
3. Certain travelers.
4. Anyone who wishes to reduce the likelihood of becoming ill with influenza.

## **2. TIMING OF ANNUAL INFLUENZA VACCINATION**

CDC will assess the vaccine supply throughout the manufacturing period and will make recommendations regarding the need for tiered timing of vaccination of different risk groups.

### **September, or as soon as vaccine is available:**

- **Primary care sites, medical specialty practices, home health agencies and hospitals:** Vaccinate persons at risk for complications from influenza (see above) when they come for routine health care or are hospitalized. This is particularly important for children < 9 years of age who are receiving flu vaccine for the first time and therefore require 2 doses.

### **October, when flu vaccine is available:**

- **Long-term care facilities:** Vaccinate all residents and employees (state-supplied vaccine should not be used for employees at this time).
- **All inpatient and outpatient facilities and home health agencies:** Vaccinate persons at risk; health care workers (state-supplied vaccine should not be used for employees at this time); household contacts of high-risk persons, including household contacts and out-of-home caretakers of children 0 – 23 months of age.
- **Vaccination clinics:** Schedule large immunization clinics for late October and November.

### **November through March:**

- **All health care facilities:** Continue to vaccinate patients and employees, including new admissions and new hires. Beginning in December, once all of your high-risk patients have been vaccinated, state-supplied influenza vaccine may be used for health care workers.
- **Non-medical facility worksites:** Begin vaccinating employees.
- **All facilities:** Vaccinate anyone who wishes to avoid getting influenza.

## ADDITIONAL RECOMMENDATIONS

### 1. COORDINATE ACTIVITIES AMONG FLU VACCINE PROVIDERS

All flu vaccine providers within a community, including local health departments, private providers, hospitals, home health agencies, retail establishments and large employers, should meet together prior to flu season to coordinate activities to ensure access to flu vaccine for all members of the community.

### 2. VACCINATE THROUGHOUT THE FLU SEASON

Flu season usually lasts until March or April. Influenza vaccine can and should be administered throughout flu season (October – March).

### 3. MANAGE EXISTING VACCINE SUPPLIES CAREFULLY

Minimize vaccine wastage. Do not over-order, place multiple orders or hold back vaccine. Return unused state-supplied vaccine to the MDPH Regional Offices for redistribution as soon as possible. Last season, providers returned > 3,000 doses of state-supplied flu vaccine.

### 4. ADMINISTER PNEUMOCOCCAL VACCINE (PPV23) TO PERSONS AT RISK

People at risk for pneumococcal disease include everyone  $\geq 65$  years of age, people < 65 years of age with chronic medical conditions, and residents of long-term care facilities.

*New!*

MDPH is again providing PPV23 for adults. To order state-supplied PPV23, contact your local vaccine distributor or the MDPH Regional Office (see enclosed list).

### 5. STANDING ORDERS

The use of standing orders is the single most effective strategy for increasing adult vaccination rates in traditional and non-traditional in-patient and outpatient settings. The Massachusetts Hospital Association has endorsed the use of opt-out standing orders for vaccination of hospital patients. Model standing orders for flu, PPV23 and Td vaccines are available from MDPH.

For more information on strategies to increase adult immunization vaccination rates, visit the CDC web site at <http://www.cdc.gov/nip/publications/adultstrat.htm>.

In addition to the recommendations above, we would like to highlight the following points:

*New!*

- **Pregnant Women** – Pregnant women have an increased risk for hospitalization due to complications from influenza. No adverse fetal effects have been associated with flu vaccine. **Influenza vaccination can occur in any trimester.** Previously, it was recommended to vaccinate pregnant women with no other risk factors in the 2<sup>nd</sup> or 3<sup>rd</sup> trimester.
- **Travelers** – Consider flu vaccine for patients at high risk if they plan to travel to the tropics or with large organized tourist groups at any time of the year; or to the Southern Hemisphere during April-September. If flu vaccine is not available, inform these patients of the symptoms of influenza and advise them to carry anti-viral medications for prophylaxis or treatment. People who received flu vaccine during flu season do not need to be revaccinated for travel before the next year's influenza vaccine formulation is available.

- **Simultaneous Administration of Vaccines** – It is safe and effective to administer influenza, PPV23 and Td vaccines simultaneously in different anatomical sites. Providers should use annual flu immunization to assess patients for the need for pneumococcal and Td vaccines.
- **Surveillance and Outbreak Control** – Immediately notify your local health department of outbreaks of influenza-like illness (ILI) in day care centers, schools, the workplace or other institutions. Local health departments should report outbreaks to the MDPH Division of Epidemiology and Immunization at 617-983-6800 or 888-658-2850 to receive technical guidance with outbreak control, including collection of the appropriate clinical specimens.
- **Influenza Pandemic Planning** – Most public health and infectious disease experts believe that another influenza pandemic is inevitable. For information on pandemic preparedness, visit the MDPH flu web site at [www.state.ma.us/dph/cdc/epii/flu/pandemic.htm](http://www.state.ma.us/dph/cdc/epii/flu/pandemic.htm). To receive minutes from meetings of the State/Local Pandemic Planning Committee, or if you are interested in attending a meeting, contact Donna Lazorik at [donna.lazorik@state.ma.us](mailto:donna.lazorik@state.ma.us).
- **Flu Clinic Web Site** - A listing of public flu clinics by town will be available on-line in October at <http://flu.masspro.org>. If you would like to list your public flu clinics on the MassPRO web site, contact Sheryl Knutsen at 781-419-2749.

#### **ANTIVIRAL MEDICATIONS**

Antiviral drugs are an adjunct, not a substitute for, vaccination for preventing and controlling influenza. Amantadine and rimantadine are licensed for the prophylaxis and treatment of influenza A. Two neuraminidase-inhibitors, zanamivir and oseltamivir, are licensed for the treatment of influenza A and B. Oseltamivir is also licensed for prophylaxis of influenza A and B. For more information about the use of antiviral medications in the control of influenza, consult the package inserts and *Prevention and Control of Influenza - Recommendations of the ACIP*. (CDC. MMWR 2004;53[RR-6]: 16-24).

#### **ADDITIONAL INFORMATION**

For more information on flu vaccine and strategies to increase vaccination coverage, please refer to: CDC. Prevention and control of influenza: recommendations of the ACIP. MMWR 2004;53(No. RR-6)). <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5306a1.htm>.

Prevention of Pneumococcal Disease: Recommendations of the ACIP. MMWR 1997;46(No. RR-8). <http://www.cdc.gov/mmwr/preview/mmwrhtml/00047135.htm>

**Vaccine Information Statements (VIS's)** in English and other languages:  
[www.immunize.org/vis](http://www.immunize.org/vis).

Other documents relating to influenza and pneumococcal vaccine and outbreak control are available online on the MDPH website. Hard copies and additional information are available from your MDPH Regional Office or by calling MDPH 617-983-6800 or 888-658-2850.

Visit the **MDPH web site** [www.mass.gov/dph](http://www.mass.gov/dph) and click on the *Influenza Information* icon for:

Link to the MassPRO listing of public flu clinics across the state  
Influenza surveillance  
Vaccine availability  
Information for consumers

Guidelines and recommendations for providers, including model standing orders  
Information on pneumococcal disease and vaccine for adults